

CLAIMS

What is claimed is:

1. A tool for securing a binding strap such as a chain around a load comprising:

5 an internally threaded tube and opposing open ends, threaded shafts
threadably inserted into the opposing open ends and the threading in the tube and on
the shafts adapted to provide common contraction and extension of the shafts
relative to the tube interior with the shafts not turning and the tube turning;

 a gear fixed to the tube exterior including gear teeth, and a pawl and pawl
10 housing mounted over the gear and pivotal around the gear, said pawl having
opposing ends adapted for selective pivotal engagement with the gear teeth and as
selectively engaging the gear teeth preventing relative rotation of the housing in a
selective one of the rotative directions; and

 a spring biased pinion carried by the housing and urged into engagement
15 with the pawl at a position with the pawl ends out of engagement with the gear teeth
and as so engaged urging non-pivotal movement of the pawl whereat free rotation of
the tube relative to the shafts is permitted.

2. A tool as defined in Claim 1 wherein the pawl is substantially an
inverted V-shape and pivoted near the apex of the V, and the outer surface at the
20 apex includes a center depression into which the pinion extends to retain the pawl in
a non-engaging position with the gear.

3. A tool as defined in Claim 1 wherein the handle protrudes from said
housing to provide a lever advantage for pivoting of the pawl housing relative to the
shafts, said handle pivotally attached to the housing for selective pivoting of such
25 lever to a parallel relation to the tube.

4. A tube is defined in Claim 1 including a lock for locking the pawl in
an engaging position only for insertion of the shafts into the tube.

5. A tool is defined in Claim 4 wherein the pawl has a through bore mateable to a through bore in the housing to permit the insertion of a lock through the through bores when aligned to prevent pivotal movement of the pawl relative to the housing.

5 6. A tool for securing a binding strap such as a chain around a load comprising:

an internally threaded tube and opposing open ends, threaded shafts threadably inserted into the opposing open ends and the threading in the tube and on the shafts adapted to provide common contraction and extension of the shafts
10 relative to the tube interior with the shafts not turning and the tube turning;

a gear fixed to the tube exterior including gear teeth and a pawl and pawl housing mounted over the gear and pivotal around the gear, said pawl having opposing ends adapted for selective pivotal engagement with the gear teeth and as selectively engaging the gear teeth preventing relative rotation of the housing in a
15 selective one of the rotative directions; and

a handle extended from said housing to provide leverage for an operator to pivot the housing with the pawl engaging the gear of the tube for forced rotation of the tube relative to the shafts, said handle pivotally connected to the housing and as pivoted into an alternate position said handle extended substantially parallel to said
20 tube for convenient storage.

7. A tool for securing a binding strap such as a chain around a load comprising:

an internally threaded tube and opposing open ends, threaded shafts threadably inserted into the opposing open ends and the threading in the tube and on
25 the shafts adapted to provide common contraction and extension of the shafts relative to the tube interior with the shafts not turning and the tube turning;

a gear fixed to the tube exterior including gear teeth and a pawl and pawl housing mounted over the gear and pivotal around the gear, said pawl having opposing ends adapted for selective pivotal engagement with the gear teeth and as

selectively engaging the gear teeth preventing relative rotation of the housing in a selective one of the rotative directions; and

5 said pawl and housing having alignable through bores and in aligned position with a pawl end engaging the gear for producing insertion of the shafts, and a lock pin extended through the aligned through bores to prevent extension of the shafts from the tube.

8. A tool as defined in Claim 1 wherein the binding strap is at least in part a sequence of chain links surrounding the load, said shafts having outer hook ends secured to the chain link loops at spaced positions within said sequence
10 whereby tightening produces a loosened loop of the intermediate chain links.

9. A tool a defined in Claim 8, including a lock for locking the pawl in an engaging position and to further lock the loosened loop of chain links to the device.